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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,880	06/27/2005	Kenji Inagaki	Q88345	1798

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WASHINGTON, DC 20037

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/540,880

Applicant(s)

INAGAKI, KENJI

Examiner

Lynda M. Salvatore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 6/27/05, 9/08/06.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pike et al., US 6,090,731 in view of Yamamoto, EP 1 110 988 A1.

The patent issued to pike et al., teach forming a conjugate fiber comprising a thermoplastic polyolefin such a polypropylene and polyester such as polyethylene terephthalate (abstract column 5, 7-47). With regard to the staple fiber limitations set forth in claim 1, Pike et al., defines the term "fibers" include staple fibers (column 2, 50-55). With regard to the fiber shape limitations set forth in claims 8 and 9, Pike et al., teach forming side-by-side and concentric sheath/core configurations (column 5, 60-column 6, 10). With regard to the ratio of the thermoplastic and polyester, Pike et al., teach employing between 10-90% polyolefin (column 5, 8-25). As such, the claimed ratio limitations set forth in claim 10 would inherently be met. With regard to the non-woven fabric limitations, Pike et al., teach forming a non-woven fabric from the conjugate filaments (column 6, 31-35).

Pike et al., fails to teach the claimed polyester formed from the reaction of the compounds set forth in claims 1-7, however, the published EP application discloses the claimed polyester (abstract). Said polyester is further melt-spun. Though, the published EP application does not explicitly disclose melt-spinning the polyester into fibers, it is generally known in the

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art that melt-spinning is used to form fibers. Said polyester composition exhibits good color tone and excellent forming properties (abstract). Specifically, with regard to the catalyst limitations set forth in claim 1, see the abstract. With regard to the reaction products set forth in claim 1, see abstract and sections 0014-0015). With regard to claim 2, see section 0019. With regard to claim 3, see section 0033. With regard to claim 4, see section 0030. With regard to claims 5 and 6, see section 0042. With regard to claim 7, see sections 0047-0048.

Therefore, motivated by the desire to produce a conjugate fiber having good color tone and excellent forming properties, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the polyester component in the conjugate fibers taught by Pike et al., with the polyester composition disclosed in the published EP application.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pike et al., US 6,090,731 in view of Yamamoto, EP 1 110 988 A1 as applied to claim 1 above and further in view of Colman et al., US 6,384,297.

The combination of prior art fails to teach the claimed fiber thickness and length as well as the method of forming the non-woven fabric, however, the patent issued to Colman et al., teach conjugate binder staple fibers having a length of less 6mm and dtex of 2.2 (column 8, 60-65 and column 9, 25-45). With regard to claim 12, Colman et al., teach forming an air laid non-woven (column 8, 25-50 and column 9, 13-20). Colman et al., further teach thermal bonding (column 10, 60-65). Colman et al., teach forming disposable garments (claim 1).

Therefore, motivated by the desire to form a non-woven fabric suitable for use in disposable garment applications, it would have been obvious to one having ordinary skill in the

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art at the time the invention was made to form the conjugate staple fibers of Pike et al., view of the published EP application having the claimed dtex and length as taught by Colman et al. With regard to the air-laying process, it is commonly known in the art that air-laying processes using staple length fibers as evidenced by Colman et al., form non-woven fabrics. Thus, it would be within the skill of a worker in the art to select a compatible fabric forming method for the staple length fibers.

With specific regard to claim 14, the combination of prior art fails to teach the process of interlacing before heat treatment; however, it is the position of the Examiner that said limitation constitutes a method limitation not germane to the final product structure.

The presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to product. *In re Stephens*, 145 USPQ 656

The claimed product appears to be the same or similar to that of the prior art, although produced by a different process. As such, the burdens shifts to Applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,292

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

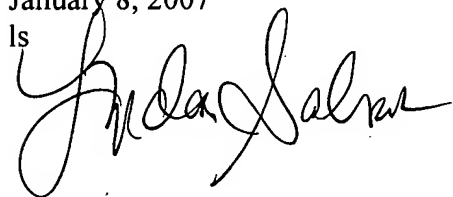
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 8, 2007

ls

A handwritten signature in black ink, appearing to read "J. M. Salas", written over the "ls" text.